

ROYAL SANTARY INTERIOR

CITY OF MELBOURNE



HEALTH COMMITTEE'S REPORT FOR 1926

MEMBERS OF COMMITTEE.

Alderman Stapley (Chairman). Councillor Sir George Cuscaden.

Councillor Carter (Elected 15th November, 1926).

Councillor Kent Hughes.

Councillor Kane

Councillor Smith (Retired 31st October, 1926)

Councillor Westley.

The Health Committee have the honor to submit their report for the year 1926.

REPORTS OF OFFICERS.

The Report of the Medical Officer of Health (Dr. T. W. Sinclair), relating to the vital statistics of the City, the prevalence of epidemic diseases, the measures taken to prevent the spread of infection, and the work of the Inspectorial Staff, is attached hereto, together with Reports by Dr. R. Southby, regarding the progress of the Council's Anti-Diphtheria Campaign, and by Messrs. Dunn and Son, City Analysts, and Dr. R. J. Bull, Director of Bacteriological Laboratory, University of Melbourne.

STATISTICS.

According to the return of the Government Statist, the estimated mean population of the City in 1926 was 101,650, which represents a decrease of 130, as compared with the previous year. The number of births in 1926, including those which occurred in the Women's Hospital and the Queen Victoria Hospital, was 4,426. Excluding the figures for both hospitals, the number of births is equivalent to a rate of 12.86 per 1,000. The deaths from all causes numbered 997, as compared with 954 in the previous year. The general death rate, 9.80 per 1,000, is .47 higher than the rate in 1925 (which was the lowest on record for the City), and is the second lowest ever recorded for the City. The death rates for diarrhoeal diseases and all tubercular diseases are the lowest on record.

INFANTILE MORTALITY.

The deaths of children under the age of one year registered during the year numbered 192, the number for the year 1925 being 194. Excluding the Hospital figures, the number of deaths is equivalent to an infantile mortality rate of approximately 77 per 1,000 births, as compared with 71 per 1,000 for the previous year.

INFECTIOUS DISEASES.

There were 45 cases of scarlet fever during the year, or .44 per 1,000. This represents a decrease of 44 in comparison with 89 cases for the previous year, and is the lowest number of cases reported for twelve years. Only one death occurred, which is equivalent to a rate of .009

per 1,000. The Council's nurse paid numerous visits to the homes of sufferers and institutions in order to ensure adequate measures being taken to prevent the spread of infection, and to distribute the precautionary leaflet issued by the Council.

Inspection disclosed insanitary defects at 11 dwellings, for which notices under the Health Act were subsequently issued.

There were 168 cases of diphtheria, as compared with 163 in the previous year. This is equivalent to an attack rate of 1.65 per 1.000, and is the second lowest for the past twenty years.

Six deaths occurred, representing a death rate of .05 per 1,000, which is the third lowest recorded for the City for twenty-one years.

Visits totalling 319 were paid by the Council's nurse to homes in order to enforce isolation, and 736 swabbings were obtained for bacteriological examination, while 22 visits were made to various schools and institutions for the same purpose.

Full details of the work in connection with the special Anti-Diphtheria Campaign, inaugurated by the Committee in 1924, are contained in the reports of the Medical Officer of Health and Dr. R. Southby, which are attached hereto. The incidence of cases in the 5 to 15 years of age group for 1926 shows a pronounced relative fall of nearly 28 per cent. on the average for the same age group for the ten years 1915-1924. This is very gratifying, and indicates the steadying influence which these newer measures of prevention are having on the prevalence of the disease. None of the cases which proved fatal had been immunised against diphtheria, and their ages indicate the necessity for a more extensive application of the Schick test and active immunisation amongst children under 5 years of age. The cost of the campaign last year was £597/12/11, of which £500 represents the salary of the Medical Officer specially appointed for this work.

Four cases of typhoid fever were reported in 1926, which represents an attack rate of .03 per 1,000. Only one case proved fatal. This is the eighth consecutive year in which there has been one death only from this disease, and it is equivalent to a death rate of .009 per 1,000. The low figures for 1926 are the same as for the year 1925, and encourage the hope that typhoid fever may soon be eradicated from the City.

Notifications of 80 cases of tuberculosis were received. The number of deaths (57) is equivalent to a rate of .56 per 1,000, as compared with 81 per 1,000 for the previous year, when 83 deaths occurred out of 107 cases. The Council's nurse paid 1,447 visits to the homes, and gave advice on methods of preventing the spread of infection and enforced observance of the Council's requirements.

CAMPAIGN AGAINST POLIOMYELITIS (INFANTILE PARALYSIS).

Only one case of Poliomyelitis was notified during the year, as compared with 13 in the previous year. The scheme of the metropolitan municipalities for combating Poliomyelitis, initiated by the Committee in April, 1925, was continued until the end of April last year. Up to the end of April, 1926, 6 cases only of the disease had been reported in the metropolis, as compared with 30 cases in 1925, and the number declined still further after April. It is considered that the intensive work carried out under the scheme in 1925 partly contributed to the much-reduced incidence in 1926. The total cost of the campaign was £638/11/-, which was equally borne by the State Government and the metropolitan municipalities. The City's proportion of the cost, on a population basis, was £44/19/8.

COMBATING HYDATID DISEASE.

During the year, a Conference of Metropolitan Medical Officers of Health and School Medical Officers was convened by the Committee for the purpose of considering the prevalence of hydatid disease and the necessity for measures being adopted to prevent the spread of the disease, when resolutions were adopted urging municipal councils, abattoirs authorities, and departments concerned with education and public health to join in a vigorous preventive campaign against the disease.

As the result of the Committee's representations, this disease was made a notifiable disease under the Health Act 1919 by the Commission of Public Health, as from the 4th August last.



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Details as to cases of this disease which occurred in the City last year are contained in the Medical Officer of Health's report, which is attached hereto.

CANCER.

There were 105 deaths from cancer during the year. The average yearly number of deaths for the past 14 years in the City is 94, or 7.59 per cent. of the total mortality from all causes.

Steps were taken by the Committee to educate the public in the early and suspicious symptoms of this disease by means of free public health lectures delivered by Dr. Mervyn A. Stewart, on behalf of the Council, in the Temperance Hall, City, and the North Melbourne and Kensington Municipal Buildings, and the printing and distribution at hospitals and baby health centres of copies of a leaflet on "Cancer: Its Prevention and Cure."

INFECTIOUS DISEASES HOSPITAL.

The Council's contribution towards the maintenance of the Queen's Memorial Infectious Diseases Hospital for 1926 amounted to £7,376/10/6, as compared with £8,024/15/1 for the previous year.

HEATHERTON SANATORIUM.

The Council's contribution towards the maintenance of the Heatherton Sanatorium for 1926 was £1,654/13/-, as compared with £1,491/6/2 for 1925.

SMOKE NUISANCE.

Thirty complaints of smoke nuisances were received during 1926, and 126 inspections and observations were undertaken. Alterations were affected at 12 premises for prevention of nuisances from smoke. Three prosecutions were instituted, in respect of which fines and costs amounting to £7/2/- were imposed.

CONDEMNATION OF HOUSES.

The Committee continued to exercise vigilance regarding the sanitary condition of premises during the year. Four hundred and twenty-five premises were condemned, of which 238 were repaired, 58 demolished, and at the balance (129) renovating work was in progress at the end of the year. Thirty-five stables were also condemned, of which 16 were demolished, 13 re-constructed, and 16 discontinued. No fewer than 1,225 condemned premises in the City have been demolished since 1913, under orders made by the Council on the recommendation of the Committee.

FOOD.

During the year, 321 samples of various kinds of food were purchased for the purpose of analysis in accordance with the provisions of the Health Act. The samples comprised:—Milk, 292; butter, 6; mustard, 4; white pepper, 4; tomato sauce, 7; vinegar, 8. The number of milk samples (12) below the standard was equivalent to a percentage of 4.1, as compared with 5.5 for the preceding year. One milk sample was found to contain a prohibited preservative (formaldehyde).

The total number of adulterated samples of all foods was 15, in respect of which proceedings were taken, resulting in fines and costs to the amount of £68/5/6 being inflicted.

Prosecutions were also instituted in respect of 51 breaches of the Health Act and Regulations, the fines and costs imposed amounting to £191/7/6, as against 42 breaches (£172/8/-) in 1925.

Twenty-four seizures of food unfit for human consumption, or in contravention of the Health Act were made, and food utensils in defective condition were seized in four instances.

QUESTION OF IMPROVED MILK SUPPLY.

As the outcome of a report by the Chairman (Alderman Stapley), after a visit to New Zealand, in regard to the Wellington Municipal Milk Supply system, the services of Mr. R. E. Herron, General Manager of the

Wellington City Council's Milk Department, were secured for the purpose of reporting upon the milk supply of Melbourne.

Mr. Herron visited Melbourne, made exhaustive investigations into the question generally, and submitted a lengthy report setting out the result of such investigations, and recommending the establishment of a system of municipal milk supply for the City of Melbourne.

The Council adopted the principles outlined in Mr. Herron's report as a working basis for a municipal milk supply for Melbourne.

As the existing powers conferred by the Milk Supply Acts of 1922 and 1924 did not permit of a milk supply being undertaken by the Council to the exclusion of other suppliers, the Committee, as authorised by the Council, waited upon the Minister of Public Health, and asked whether the Government would be prepared to introduce the necessary legislation to enable the Council to undertake and carry out a system of municipal milk supply for the City to the exclusion of other milk suppliers.

The Minister replied that he could not recommend a monopoly of milk supply for the City of Melbourne only without making the scheme applicable to the whole metropolitan area, and suggested that the Council should submit to him some definite, concrete scheme detailing how the Council proposed to obtain, handle and distribute its milk, and he would then be prepared to submit such proposals to the Cabinet, but not otherwise.

A Conference of representatives of metropolitan municipalities was convened by the Council, on the Committee's recommendation, to consider a comprehensive scheme of milk supply for the metropolitan area, and a sub-committee was appointed to consider and report to the Conference upon the whole question.

EATING HOUSES.

During the year, 381 eating houses were registered, 58 were partly reconstructed and 30 were abolished. Proceedings for breaches of the regulations were taken in 22 cases, in respect of which fines and costs amounting to £76/2/- were imposed.

With a view to exercising close supervision over these premises in the interests of the public, 9,341 inspections were made during the year by the Council's Health Inspectors.

PREMISES FOR THE MANUFACTURE OF ICE CREAM, AERATED WATERS, ETC.

The number of premises for the manufacture of ice cream and aerated waters registered with the Council last year was 159, as compared with 149 for the previous year. Inspections totalling 2,531 were made of these premises, and 7,553 inspections were made of other food premises during the year. Fifty-seven premises were partly reconstructed and 24 were abolished. In 9 instances prosecutions were instituted, fines and costs amounting to £33/5/- being imposed.

OFFENSIVE TRADES.

The Committee have continued to exercise supervision over offensive trade businesses, totalling 94 in the City, no fewer than 721 inspections having been made during the year by the Council's Health Inspectors. Registration was refused in two instances. One new business was registered, the premises being newly erected, while 17 premises were partly reconstructed. A full list of the premises registered in the City as offensive trade establishments is set out in the formal report to the Commission of Public Health, which has already been forwarded to the Commission in compliance with the provisions of the Health Act.

REGISTRATION OF BOARDING-HOUSES.

The number of boarding-houses registered with the Council last year was 666, as compared with 674 for the previous year, while 36 were partly reconstructed and 83 were abolished. In two instances prosecutions were instituted, fines and costs amounting to £2 being imposed. Inspections totalling 2,578 were made by the Council's Health Inspectors.

FACTORIES.

Four hundred and two applications for registration of premises as factories were dealt with by the Committee last year; 246 were approved, 5 refused, 28 withdrawn, and 123 were under consideration at the end of the year. These premises are registered by the Factories Department, after the Council has approved of the premises being suitable for registration. The number of registered factories and shops in the City is 2,171, and 4,074 respectively.

RAT INFESTATION AND DESTRUCTION.

The number of premises inspected and dealt with in connection with rat destruction in 1926 was 2,182, as against 2,452 in 1925, and the number of rats caught was 9,597, as compared with 10,346 for the previous year. The total amount collected in charges for the service of the rat-catching staff for rat destruction was £1,027/8/3, as compared with £1,010/9/10 for the previous year. Structural work for rat prevention was effected at 114 premises. The number of prosecutions was eight, in respect of which fines and costs amounting to £14/1/- were imposed.

HAIRDRESSERS' SHOPS.

Inspections totalling 2,162 were made of hairdressers' shops in the City last year for the purpose of forcing compliance with the regulations. Sixteen premises were reconstructed and ten were abolished.

MATERNAL AND INFANT WELFARE.

A summary of the work carried out at the four City Baby Health Centres is set out in the report of the Medical Officer of Health attached hereto.

The total amount paid by the Council towards the maintenance of Baby Health Centres for the year 1926 was £707, as against the State Government's contribution of £500.

During the year the Council's Nurse Inspector visited 1,294 infants at their homes, when it was found that ninety-two per cent. were being naturally fed.

Last year an up-to-date brick baby health centre building was erected by the Council in Abbotsford Street, North Melbourne, at a cost of £2,420 (including cost of land), the cost of furnishing the centre being £265.

This centre, which is considered to be the most up-to-date in the State with regard to finish and general lay-out, was officially opened on 26th May by the Lady Mayoress (Lady Brunton), who was presented with a gold key by the Chairman of the Committee (Alderman Stapley). The new building is proving in every way most suitable for the work, and a great convenience to residents of North Melbourne owing to its central situation. The centre is ably managed by a Ladies' Committee, under the jurisdiction of the Victorian Baby Health Centres' Association.

SPECIAL MILK SUPPLY FOR INFANTS.

Special bottled milk for infants was again supplied at reduced rates, the number of infants participating in the supply being 163, as compared with 185 in 1925.

The supply, which is a pasteurised one, was obtained from the Willsmere Milk Company, and it was continued throughout the whole year. The total cost of the supply was £784/12/3, slightly over 44 per cent., of which, viz., £345/5/10 was recovered from the sale of milk coupons to mothers. The milk is supplied free in necessitous cases, but when parents can afford to pay they are expected to do so.

TREATMENT AND AFTER-CARE OF CRIPPLES.

In response to representations made to the Minister of Public Health by the Committee in regard to the question of the establishment of an institution for the care and treatment of cripples recommended by a Conference of Metropolitan Medical Officers of Health and various interested bodies which met last year on the Committee's initiative, the Minister replied that the Government was of the opinion that the treatment of crippled children should be confined to the Children's Hospital (which had already made arrangements to undertake such work), and also to the children's wards of the general hospitals.

He further stated that the provision of hospital accommodation for adult cripples, being a branch of curative medicine, could not be considered as one of the functions of the Government, but should be left to the municipalities and the charitable bodies who undertake this class of work. If, however, a definite, concrete scheme were submitted to the Government, consideration would be given by the Cabinet to the question of a subsidy.

The Committee are giving further consideration to the proposal.

HEALTH LECTURES DEALING WITH VENEREAL DISEASES AND CANCER.

Free public health film lectures dealing with Venereal Diseases and Cancer were given in the Temperance Hall, City, and the North Melbourne and Kensington Town Halls, by Dr. Mervyn A. Stewart, under the Council's auspices, and proved highly successful.

This is the second series of public health lectures arranged by the Committee, and the fact that aver 20,000 persons have heard such lectures is an indication that the public appreciates the Council's activity in this direction. The Committee feel that the lectures will have a beneficial effect throughout the community by reason of the dissemination of correct knowledge on these important subjects which are at present engaging the attention of the various health authorities.

During Health Week in November, free public health lectures on "The Fly," Diphtheria and Tuberculosis were delivered in the Temperance Hall, City, by the Medical Officer of Health, Dr. R. Southby and Dr. Mervyn A. Stewart, respectively, under the Council's auspices.

APPOINTMENT OF ALDERMAN STAPLEY AS MEMBER OF COMMISSION OF PUBLIC HEALTH.

The Committee are pleased to record that during the year the Chairman of the Committee (Alderman Frank Stapley) was appointed a member of the Commission of Public Health by the Governor-in-Council. As Chairman of the Health Committee, combined with his long Municipal experience, Alderman Stapley's appointment will, the Committee are satisfied, prove of value to the Commission and to the various local health authorities.

GENERAL.

Reference to the attached report of the Medical Officer of Health will show the detailed work carried out under the Committee during the year.

FRANK STAPLEY, Chairman.

W. V. McCALL, Town Clerk.

12th April, 1927.

CITY OF MELBOURNE



Report of the Medical Officer of Health for the Year 1926

The Chairman, Health Committee—

Sir—I have the honour to present the Annual Report on the Health of the City, and the work of this Office, done under the Health Committee, for the year 1926.

The estimated mean population is 130 below, and the number of births registered 204 above the figures for 1925.

The general death rate—9.80 per 1,000—though slightly higher than the record low rate of the previous year, is the second lowest ever recorded for the City (Table I.). The rates for Diarrheal Diseases and all Tubercular Diseases are the lowest ever recorded. The rate for Zymotic Diseases was less favorable than in 1925. Infantile deaths were slightly higher than in 1925, mainly owing to the prevalence of Whooping Cough, and the infantile mortality rate shows an increase over that of the previous year (Table I.).

Scarlet Fever showed a pronounced fall, and the number of cases reported is the lowest since 1914, while the disease was also less fatal than in 1925 (Table II). The incidence of Diphtheria was again most favorable. Though the cases exceeded by five the number reported in 1925, the figures for 1926 are the second lowest since 1906, and are comparable with those recorded before Hopetoun Ward was added to the City. The disease was more fatal than in 1925, but the number of deaths is the third lowest for 21 years. One of the deaths only occurred in a school child, and the other five deaths were in children under five years of age. Schick testing and active immunisation were continued throughout the year, and the work progressed smoothly. None of the cases which proved fatal had been immunised against Diphtheria. The reduced incidence of the disease in the 5 to 15 years age group, which is constituted principally of school children, was again recorded this year, as in 1925. This result is gratifying, for it is in this group that the great proportion of testing and immunisation is done. Results this year point to the necessity for extending the work amongst children under five years of age. The number of cases of Typhoid Fever equalled the record figures of 1925. For the eighth consecutive year, one death only was registered (Table II). Poliomyetitis showed a marked fall, only one case being reported. Owing to the reduced incidence, the Metropolitan Scheme for this disease was terminated on 29th April. It was considered that the intensive work-done during 1925 contributed considerably to the favourable results this year.

Dysentery (bacillary) was less prevalent than in 1925, but the disease was more fatal. One third of the reported cases occurred amongst inmates of the Children's Welfare Depot, Royal Park.

Encephalitis (lethargic) was more fatal this year; all of the three cases reported died.

During the year 425 premises were reported for condemnation under the Health Act. Since 1913 the number of condemned insanitary premises in the City, which have been demolished, is 1,225. Fewer infants received the special supply of milk than in 1925. Dr. Vera Scantlebury resumed duty on 18th May, but, on being appointed to the position of Director of Infant Welfare, resigned on the 30th September. Dr. Kate Campbell, who acted during Dr. Scantlebury's absence, was appointed to visit Baby Health Centres, and commenced duty on 1st October. The new building erected at Abbotsford Street, and opened during the year, has been greatly appreciated by the Staff and Mothers attending this Centre.

Dr. Annie D. Hensley resigned from her position as Medical Officer in connection with the Diphtheria Campaign on 31st March. Dr. Robert Southby was appointed to the vacancy, and commenced duty on 2nd April.

Progress in the abatement of nuisance from smoke continues to be made by the reconstruction of furnaces, use of special smoke-consuming apparatus, increased application of electric power, and the use of oil fuel.

New legislation under the Health Act 1919, passed during the year, imposes additional duties to be carried out by this Office under the Health Committee.

Proceedings were initiated by this Office for various breaches of the Health Act and Regulations, and of the Council's By-laws in 65 instances, and the total fines and costs imposed amounted to £229/2/-.

Reports of sixteen medical examinations of persons joining the Council's service, and of those retiring on account of ill-health were furnished during the year.

The work of inspections and other duties of the Office were carried out by the Staff in an efficient and tactful manner.

POPULATION.

According to a return furnished by the Government Statist, the estimated mean population of the City for the year 1926 was 101,650, being 130 less than that for 1925.

BIRTHS.

The number of births registered was 4,426, of which 2,660 occurred in the Women's Hospital, and 458 in the Queen Victoria Hospital. Excluding the figures for both hospitals, on account of the difficulty which arises in connection with the usual residence of mothers, the balance, 1,308, is equivalent to a birth rate of 12.86 per 1,000 of the estimated mean population, but can only be regarded as an approximate one for the City.

DEATHS.

The number of deaths of residents of the City registered for all causes was 997, or 43 more than the record low figure for 1925. As in previous reports, the figures have been corrected for deaths occurring in public hospitals of the metropolis, private hospitals in the City, and three large private hospitals outside of the City. The deaths of City residents in Hospitals for the Insane throughout the State, as well as those from pulmonary tuberculosis (numbering 24) which occurred in Sanatoria for Consumptives and the Austin Hospital, are also included in the total figures. The total number of deaths is equivalent to a death rate of 9.80 per 1,000 of the estimated mean population, and is .47 per 1,000 higher than in 1925. Excepting last year, the rate for 1926 is the lowest for the City, as shown in Table I. When the correction for the proportion of deaths of City residents in Metropolitan Benevolent Institutions is applied, the death rate is raised to 10.13 per 1,000.

Deaths from the principal zymotic diseases numbered 36, compared with 11 in 1925. Influenza caused 17 deaths, compared with none in 1925. Whooping Cough, 9 deaths, and Diphtheria, 6 deaths, were more fatal than in the previous year, when the deaths for these diseases were 2 and 1, respectively. Measles, with 2 deaths, and Scarlet Fever, with 1 death, were more favorable than in 1925, the figures in the latter period being 5 and 2. For the eighth consecutive year, there was one death only from Typhoid Fever. Diseases showing the principal increases over the figures

for 1925 were:—Cancer, 105 deaths; Bright's Disease, 89; Pneumonia, 76; Other Diseases of the Circulatory System, 69; Influenza, 17; Diabetes, 15; Whooping Cough, 9; and Diphtheria, 6. The principal decreases occurred under the headings:—Diseases of the Heart, 107; Phthisis, 57; Developmental Diseases, 41; Diarrhæa and Enteritis, 22; Other Diseases of the Nervous System, 21; Suicide, 9; Tubercular Meningitis, 4; and Measles, 2.

The deaths in Hospitals for the Insane numbered 31, compared with 38 in 1925, and the causes given were:—Pneumonia, 7; Bright's Disease, 7; Other Diseases of the Nervous System, 6; Senility, 4; Phthisis, Diseases of the Heart, Diarrhæa and Enteritis, each 2 deaths, and other Diseases of the Respiratory System, 1 death.

The following table, to which the corrections mentioned above have been applied, comprises a detailed statement of the causes of death within the City for 1926:—

| Typhoid Fever | 1 |
|--|-----|
| Measles | 2 |
| Scarlet Fever | 1 |
| Whooping Cough | 9 |
| Diphtheria | 6 |
| Influenza | 17 |
| Erysipelas | 3 |
| Other Epidemic Diseases | 7 |
| Phthisis | 57 |
| Tubercular Meningitis | 4 |
| Cancer* | 105 |
| Diabetes | 15 |
| Alcoholism | 5 |
| Meningitis | 5 |
| Cerebral Hæmorrhage | 37 |
| Other Diseases of the Nervous System | 21 |
| Diseases of the Heart | 107 |
| Other Diseases of the Circulatory System | 69 |
| Bronchitis | 17 |
| Pneumonia | 76 |
| Other Diseases of the Respiratory System | 18 |
| Diseases of the Stomach | 7 |
| Diarrhœa and Enteritis | 22 |
| Appendicitis | 9 |
| Hernia and Intestinal Obstruction | 10 |
| Cirrhosis of the Liver | 10 |
| Peritonitis | 1 |
| Other Diseases of the Digestive System | 13 |
| Bright's Disease (Acute and Chronic) | 89 |
| Other Genito-Urinary Diseases | 17 |
| Puerperal Septicæmia | 2 |
| Other Puerperal Diseases | 11 |
| Prematurity | 33 |
| Developmental Diseases | 41 |
| Senility | 30 |
| Suicide | 9 |
| Accident | 56 |
| All Other Causes | 55 |
| Till Other Catalog | |
| | 997 |
| Deaths under one year—all causes | 123 |
| | |

A comparison with the figures for previous years is supplied in Table I, showing population and certain death rates for the City:—

TABLE I.

Showing Population and certain Death Rates in the City for the following years:—

| | | DEATH RA | TE PER 1,0 | 000 OF POP | ULATION | | |
|------|---------------------------------|------------|---|--|-------------------------------|--|--|
| Year | Estimated Mean Population | All Causes | Diarrhoeal Diseases, including Enteritis | Principal Zymotic Diseases, except Diarrhoea | All Tubercular Diseases | Infantile Death Rate per 1,000 Births | |
| 1898 | 70,387 | 16.9 | 2.08 | 1.50 | 2.47 | 188 | |
| 1899 | 74,420 | 13.37 | 1.51 | .96 | 1.76 | 157 | |
| 1900 | 73,430 | 12.97 | 1.18 | .40 | 2.07 | 112 | |
| 1901 | 68,374 | 15.7 | 1.28 | .67 | 2.26 | 134 | |
| 1902 | 67,550 | 15.0 | 1.58 | .60 | 1.99 | 117 | |
| 1903 | 67,260 | 13.8 | 1.15 | .40 | 2.27 | 105 | |
| 1904 | 67,760 | 12.82 | .62 | .50 | 1.71 | 83 | |
| 1905 | 68,940 | 12.5 | .87 | .17 | 1.42 | 107 | |
| 1906 | 98,440 | 15.4 | 1.04 | .57 | 1.44 | 119 | |
| 1907 | 98,720 | 14.1 | .68 | .41 | 1.34 | 80 | |
| 1908 | 98,890 | 15.0 | 1.14 | .17 | $\boxed{1.39}$ | 103 | |
| 1909 | 99,800 | 13.6 | 1.84 | .46 | .99 | 98 | |
| 1910 | 100,570 | 13.77 | 1.45 | .33 | 1.13 | 115 | |
| 1911 | 102,180 | 12.6 | 1.21 | .39 | 1.27 | 100 | |
| 1912 | 103,330 | 14.2 | 1.18 | .71 | 1.07 | 106 | |
| 1913 | 104,210 | 12.79 | .64 | .35 | 1.11 | 92 | |
| 1914 | 105,200 | *13.12 | .75 | .40 | 1.24 | 86 | |
| 1915 | 105,990 | 12.71 | .57 | .50 | .84 | 83 | |
| 1916 | 105,182 | 12.93 | .69 | .49 | 1.04 | 89 | |
| 1917 | 105,690 | 10.88 | .35 | .24 | .91 | 65 | |
| 1918 | 105,770 | 11.20 | .41 | .40 | .93 | 74 | |
| 1919 | 106,180 | 15.84 | .41 | 4.73 | .88 | 72 | |
| 1920 | 106,560 | 12.26 | .62 | .59 | 1.06 | 95 | |
| 1921 | 105,726 | 11.53 | .66 | .25 | 1.22 | 107 | |
| 1922 | 101,850 | 10.67 | .38 | .15 | .87 | 75 | |
| 1923 | 101,930 | 11.72 | .62 | .53 | 1.04 | 109 | |
| 1924 | 101,960 | 10.93 | .31 | .37 | .95 | 83 | |
| 1925 | 101,780 | 9.33 | .27 | .10 | .92 | 71 | |
| 1926 | 101,650 | 9.80 | .24 | .35 | .60 | 77 | |

*Since 1914 deaths of residents of the City in Hospitals for Insane have been included

INFANTILE MORTALITY.

The number of deaths of children under one year of age registered was 192, including the figures for all deaths at the Women's and Queen Victoria Hospitals. Excluding the deaths of infants in these hospitals, viz., Women's 79 deaths, Queen Victoria 12 deaths, there is a balance of 101. It is not possible to obtain exact information as to the usual place of residence of all mothers who enter these hospitals for their confinements. Omitting, therefore, both births and deaths in hospitals, the number of deaths is equivalent to an infantile mortality rate of 77 per 1,000 births, and is slightly higher than that for 1925. However, as explained above, it can only be regarded as an approximate one for the City. The principal increases this year occurred under the headings Whooping Cough, 7 deaths, other epidemic diseases 3, Pneumonia 12, and Prematurity 33. Notable decreases were Diarrhæa and Enteritis 13 deaths, and Developmental Diseases 39. In the following table, the deaths of those infants whose mothers were residents of the City have been included.

DEATHS UNDER ONE YEAR.

| | 1 |
|-------------------------|---|
| 14/ la a a i (\ 1 | 7 |
| Influenza | 1 |
| | 2 |
| Other Epidemic Diseases | 3 |

| Meningitis | 1 |
|--|-----|
| Bronchitis | 1 |
| Pneumonia | 12 |
| Diseases of the Stomach | 1 |
| Diarrhœa and Enteritis | 13 |
| Hernia and Intestinal Obstruction | 2 |
| Other Diseases of the Digestive System | 1 |
| Bright's Disease (Acute and Chronic) | 1 |
| Prematurity | 33 |
| *Developmental Diseases | 39 |
| All other causes | 4 |
| | |
| | 123 |

^{*}Under the general heading "Developmental Diseases" are included injury at birth, debility at birth, atelectasis, congenital defects, atrophy, marasmus and dentition.

METEOROLOGY.

The following table, which is compiled from returns furnished by the Commonwealth Meteorologist, shows that the mean air temperature for the year was 59.5 deg. Fahr., or 1.2 deg. above the mean for 58 years. Higher mean temperatures were most marked in the late summer and in the winter months. The year was a dry one and, except for the months of January, May and June, in which the rainfall was above the average for 58 years, all other months were well below it. Notwithstanding the higher mean temperatures and dry conditions, it is gratifying to record that deaths from diarrheal diseases were less than in any previous year.

TEMPERATURE AND RAINFALL, 1926.

| | Tem | perature in | Shade | Departure of | Rai | nfall | |
|-----------|-----------------|-----------------|----------------------|--|-------------------------|------------------------|--|
| Month | Mean Maximum | Mean Minimum | Mean for Month | Mean Monthly Temperature from mean for 58 years (+ or —) | No. of Rainy Days | Amount in Inches | Departure of amount from Average for 58 Years (+ or —) |
| January . | 73.8 | 55.5 | 64.7 | Nil | 11 | 3.50 | +1.68 |
| February | 82.3 | 57.5 | 69.9 | +2.6 | 1 | .05 | -1.68 |
| March . | 77.8 | 57.0 | 67.4 | +2.9 | 5 | 1.37 | 86 |
| April | 69.5 | 53.2 | 61.4 | +1.8 | 13 | 1.97 | 34 |
| May | 58.9 | 47.3 | 53.1 | 9 | 17 | 2.43 | + .27 |
| June | 58.0 | 45.3 | 51.6 | +1.3 | 12 | 2.82 | + .70 |
| July | 57.5 | 45.4 | 51.4 | +2.9 | 18 | 1.45 | 39 |
| August . | 57.9 | 44.0 | 51.0 | Nil | 21 | 1.55 | 26 |
| September | 65.9 | 47.8 | 56.9 | +2.9 | 14 | 1.15 | -1.19 |
| October . | 68.7 | 50.0 | 59.4 | +1.9 | 16 | 1.85 | -1.14 |
| November | 72.4 | 51.7 | 62.1 | 9 | 12 | 1.10 | -1.09 |
| December | 77.6 | 55.3 | 66.5 | +1.9 | 9 | 1.27 | -1.02 |
| Year | 68.3 | 50.8 | 59.5 | +1.2 | 149 | 20.51 | -4.93 |

NOTIFIABLE INFECTIOUS DISEASES.

The following table gives the monthly number of notifications for each disease during 1926:—

| Disease | Jan. | Feb. | Mar. | April | Мау | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|---------------------------|------|----------|----------|-------|----------|----------|------|------|-------|------|------|------|------|
| Scarlet Fever | 4 | 1 | 3 | | 8 | 7 | 4 | 8 | 3 | 5 | 1 | 1 | 45 |
| Diphtheria | 10 | 12 | 14 | 21 | 16 | 12 | 15 | 12 | 22 | 14 | 6 | 14 | 168 |
| Typhoid Fever | | | 2 | | | <u> </u> | 1 | | | 1 | - | | 4 |
| Pulmonary Tuberculosis | 10 | 4 | 4 | 8 | 4 | 2 | 5 | 8 | 10 | 6 | 8 | 6 | 75 |
| Other Tubercular Diseases | | <u> </u> | 1 | | | 1 | _ | 1 | - | 1 | 1 | | 5 |
| Cerebro-Spinal Meningitis | _ | | | | | | | 1 | 1 | _ | - | | 2 |
| Poliomyelitis | _ | <u> </u> | <u> </u> | | | 1 | | _ | | _ | - | | 1 |
| Puerperal Fever | | _ | | | | | - | _ | | 2 | - | 1 | 3 |
| Dysentery (Bacillary) . | 1 | 2 | 1 | | 2 | _ | _ | | — X | _ | 3 | | 9 |
| Encephalitis (Lethargic) | 1 | | <u> </u> | | — | | _ | _ | . — I | | - | 2 | 3 |
| Tetanus | | _ | | - | | 1 | _ | | | _ | | | 1 |
| Hydatid | - 0 | | _ | _ | | - | | 1 | | | | _ | 1 |

SCARLET FEVER.

Forty-five cases were reported, equivalent to an attack rate of .44 per 1,000 of the estimated mean population, compared with 89 cases in 1925. The number of cases reported is the lowest for twelve years. Twenty-one attacks occurred in males, and 24 in females. There was only one death, which is equivalent to a death rate of .009 per 1,000. Four of the cases notified were inmates of institutions, while two cases were reported as also suffering from Diphtheria. In one instance, investigation showed that the infection had probably been contracted outside of the City. Three cases of the disease occurred on a dairy premises at Flemington. They were all mild in character, and were promptly removed to Fairfield Infectious Diseases Hospital. The premises were disinfected, and the sale of milk stopped for one week. No cases occurred subsequently amongst customers supplied from this dairy.

The Council's Nurse paid 13 visits to homes and institutions in order to enforce measures for the prevention of the spread of infection, and to distribute the leaflet of precautions. Inspection showed that, at 11 premises, there were defects of an insanitary nature, for the correction of which notices under the Health Act 1919 were subsequently issued.

A comparison of the incidence, mortality and case fatality of Scarlet Fever, Diphtheria and Typhoid Fever, is shown in Table II, while the distribution of cases in the various wards of the City is shown in Table III.

DIPHTHERIA.

The number of cases notified was 168, or five more than the low figure in 1925. Seventy-three cases occurred in males, and 95 in females. Since 1906, when Hopetoun Ward was added to the City, there have not been two consecutive years of such low incidence as 1925 and 1926. The number of cases reported is the second lowest for the past twenty years, and is equivalent to an attack rate of 1.65 per 1,000 of the estimated mean population. Six deaths occurred, three in males and three in females. The ages of the former in years were 4, 2, and 8, and of the latter 2, 2 and 4, respectively. Only one of the fatal cases occurred in a school child (aged 8 years), and another was an inmate of a children's institution at Royal Park. Though the disease was more fatal than in 1925, when only one death occurred, the number of deaths for 1926 is the third lowest recorded for twenty-one years, and is equivalent to a death rate of .05 per 1,000. Twenty of the cases occurred amongst the staffs or inmates of various institutions, as follows:—Public hospitals, 8 cases; children's institutions, 9; and other institutions, 3. In six instances investigation showed that infection had probably been contracted outside of the City, while four cases were reported as also suffering from Scarlet Fever. Inspection of the homes of cases disclosed defects of an insanitary nature in 44 instances, for which notices under the Health Act were subsequently issued. The Council's Nurse paid 319 visits to homes of cases, 22 visits to schools and institutions, and one visit to a dairy in order to deliver the precautionary leaflet, enforce measures for the prevention of the spread of infection, and take 736 swabbings for bacteriological examination. On twenty occasions she also gave assistance in the work of Schicktesting and immunisation.

The report of Dr. R. Southby, which is attached, covers the details of work in connection with the special campaign against the disease during 1926. A special report was furnished by me on the general progress and results for the year. It would, however, appear desirable to record some of the more notable features in regard to the incidence and mortality for 1926, compared with previous periods. The large regular increase in incidence, which usually characterises the autumn and winter months, was, as in 1925, conspicuous by its absence, as shown in the following table:—

| Period | | | | | | | - | Aug. | | | | | |
|-----------------------|----|----|----|----|----|----|----|------|----|----|----|----|-----|
| 1913-1924 (average) . | 19 | 24 | 30 | 34 | 44 | 42 | 39 | 36 | 31 | 25 | 26 | 22 | 376 |
| 1925 | 13 | 10 | 16 | 14 | 15 | 14 | 10 | 13 | 19 | 16 | 6 | 17 | 163 |
| 1926 | 10 | 12 | 14 | 21 | 16 | 12 | 15 | 12 | 22 | 14 | 6 | 14 | 168 |

Most of the work of testing and immunisation was done amongst the populations of Hopetoun, Smith and Victoria Wards, which all show a lower percentage incidence in 1926 than that recorded in the average for the eleven-year period 1914-1924. On the other hand, in Albert, Bourke and Gipps Wards, where the proportion of that section of the population treated is less, the percentage incidence is higher. Age plays a great part in the incidence of Diphtheria, which is well known to be a disease largely of childhood and puberty. Though the reduction is not quite so large as in 1925, the incidence of cases in the 5-15 years age group for 1926 shows a pronounced relative fall of nearly 28 per cent. on the average for the same age group for the ten years 1915-1924.

| Period | Under 5 Years | 5 to 15 Years | 15 Years and Over |
|---------------------|----------------|----------------|-------------------|
| 1015 1004 / | 040 | 1 710 | 04.0 |
| 1915-1924 (average) | 24.6 per cent. | 51.2 per cent. | 24.2 per cent. |
| 1925 | 23.3 ,, | 33.1 ,, | 43.6 ,, |
| 1926 | 27.9 ,, | 36.9 .,, | 35.2 ,, |

The reduced percentage incidence in the 5-15 years group, which is chiefly composed of school children, was gratifying, and indicates the steadying influence which these newer measures of prevention are having on the prevalence of the disease. The low mortality figure this year compares favorably with the average rate for the period 1898-1905, before Hopetoun Ward was added to the City. None of the cases which proved fatal had been immunised against Diphtheria, and their ages indicate the necessity for a more extensive application of the Schick test and active immunisation amongst children under five years. One of the fatal cases (a girl, 2 years) gave a positive Schick test, but contracted the disease before any immunisation could be done.

This year repeats the low incidence amongst school children, which was observed in 1925. While it may not be possible to claim that the favourable results during 1926 are entirely due to the special campaign against Diphtheria, they show, in my opinion, that this work is having a decidedly steadying influence on the prevalence and danger of the disease, and constitute strong reasons for continuing these newer methods of prevention, which are strongly supported in all countries where modern measures are employed against Diphtheria.

TABLE II.

Showing the Incidence, Mortality and Case Fatality of Notified Scarlet Fever, Diphtheria and Typhoid Fever in the City for the following years:

| | S | CARLET | FEVER | | D | ІРНТНЕ | ERIA | ТҮРН | IOLD F | EVER |
|-------|---|--------|--------|-------------------------------|-----------------|--------|-------------------------------|-------|--------|-------------------------------|
| Yea | r | Cases | Deaths | Case Fatality per cent. | Cases | Deaths | Case Fatality per cent. | Cases | Deaths | Case Fatality per cent. |
| 1898 | | 106 | | | 154 | 18 | 12.68 | 237 | 27 | 11.39 |
| 1899 | | 36 | | | 84 | 10 | 11.90 | 164 | 16 | 9.75 |
| 1900 | | 6 | 1 | 16.66 | 120 | 3 | 2.50 | 118 | 16 | 13.56 |
| 1901 | | 15 | 1 | 6.66 | 91 | 4 | 4.39 | 86 | 8 | 9.30 |
| 1902 | | 164 | 1 | .61 | 122 | 5 | 4.09 | 92 | 9 | 9.84 |
| 1903 | | 184 | 1 | .54 | 110 | 5 | 4.54 | 69 | 5 | 7.24 |
| 1904 | | 165 | 3 | 1.81 | 142 | 12 | 8.45 | 58 | 6 | 10.34 |
| 1905 | | 28 | | - 1 | 142 | 4 | 2.81 | 33 | 2 | 6.06 |
| 1906* | | 23 | | 1 | 130 | 9 | 6.92 | 95 | 8 | 8.42 |
| 1907 | | 11 | | | 254 | 13 | 5.11 | 34 | 3 | 8.82 |
| 1908 | | 85 | | | 213 | 7 | 3.28 | 113 | 3 | 2.65 |
| 1909 | | 346 | 13 | 3.75 | 194 | 7 | 3.60 | 90 | 9 | 10.0 |
| 1910 | | 116 | 3 | 2.58 | 326 | 10 | 3.06 | 178 | 8 | 4.49 |
| 1911 | | 35 | 1 | 2.85 | 485 | 16 | 3.29 | 51 | 9 | 17.64 |
| 1912 | | 21 | | | 414 | 32 | 7.73 | 52 | 6 | 11.54 |
| 1913 | | 14 | | | 311 | 18 | 5.78 | 53 | 5 | 9.43 |
| 1914 | | 38 | _ | | 297 | 15 | 5.05 | 36 | 5 | 13.88 |
| 1915 | | 62 | 1 | 1.61 | 463 | 23 | 4.96 | 23 | 5 | 21.77 |
| 1916 | | 136 | 1 | .73 | 581 | 29 | 4.99 | 23 | 4 | 17.39 |
| 1917 | | 141 | 2 | 1.41 | 345 | 11 | 3.18 | 18 | 3 | 16.66 |
| 1918 | | 160 | 1 | .62 | 564 | 10 | 1.77 | 11 | 2 | 18.18 |
| 1919 | | 84 | 3 | 3.57 | 298 | 22 | 7.38 | 8 | 1 | 12.50 |
| 1920 | | 129 | 2 | 1.55 | 371 | 10 | 2.69 | 8 | 1 | 12.50 |
| 1921 | | 167 | _ | | $\parallel 429$ | 13 | 3.03 | 10 | 1 | 10.0 |
| 1922 | | 112 | 2 | 1.78 | $\parallel 268$ | 3 | 1.12 | 8 | 1 | 12.50 |
| 1923 | | 165 | 2 | 1.21 | $\parallel 250$ | 11 | 4.40 | 10 | 1 | 10.0 |
| 1924 | | 226 | 2 | .88 | 342 | 9 | 2.63 | 10 | 1 | 10.0 |
| 1925 | | 89 | 2 | 2.24 | 163 | 1 | .61 | 4 | 1 | 25.0 |
| 1926 | | 45 | 1 | 2.22 | 168 | 6 | 3.57 | 4 | 1 | 25.0 |

^{*}Hopetoun Ward added to the City.

TYPHOID FEVER.

Four cases were notified, and one proved fatal, corresponding to similar figures in 1925. Two of the cases were in males and two in females, and together are equivalent to an attack rate of .03 per 1,000 of the estimated mean population. This is the eighth consecutive year in which there has been one death only from the disease, and it is equivalent to a death rate of .009 per 1,000. It was not possible to trace the source of infection for any of the cases, three of which were admitted to hospital for treatment. Defects of an insanitary nature were found on inspection at the home of one case, and notice under the Health Act was subsequently served therefor. The Council's Nurse visited the home of one case in order to ensure measures of prevention against the spread of infection being taken, and to deliver the leaflet of precautions. The repetition this year of the favourable figures, noted in 1925, stimulates the hope that Typhoid Fever may soon be eliminated from the sickness and mortality tables of the City.

PUERPERAL FEVER.

Three cases of the disease were reported by Medical Practitioners, compared with 4 in 1925. Two deaths were registered, but one of these was determined only after inquiry by the Coroner. All cases were admitted to the Women's Hospital for treatment. Three visits were paid by the Council's Nurse in connection with cases, in order to enforce the regulations under the Midwives' Act for the prevention of the spread of infection.

The distribution of cases of Puerperal Fever, Cerebro-Spinal Meningitis, Poliomyelitis, Encephalitis, Dysentery, Tetanus and Hydatid in the various Wards of the City is shown in Table III.

POLIOMYELITIS.

One case in the City (a boy aged 5 years) was notified, compared with 13 in 1925. He was admitted to the Children's Hospital for treatment on 8th June. The clinical history showed that the paralysis affected the left arm. After lumbar puncture on 10th June, immune human serum was administered intra-thecally and intra-venously. By the 21st June, the arm had much improved, inco-ordination had almost entirely disappeared, and he was discharged to the out-patient department. The source of infection for the case could not be traced.

Work in connection with the disease in the City was linked up with the scheme of the Metropolitan Municipalities commenced in April, 1925. At the beginning of this year, a pamphlet on the diagnosis and treatment of Poliomyelitis was prepared and issued by the Executive Committee, on behalf of the Medical Officers of Health of the Metropolitan Municipalities, to all medical practitioners. The pamphlet was the subject of very favorable comment, not only in this State, but in other States of the Commonwealth and in England. Up to the end of April, six cases only of the disease had been reported in the Metropolis, compared with 30 in 1925, and the number declined still further after April. It was considered that the intensive work done under the scheme in 1925 had partly contributed to the much-reduced incidence in 1926. The Executive Committee therefore decided to terminate the scheme and the engagement of Dr. Jean Macnamara, as visiting Medical Officer for Poliomyelitis, ceased on 29th April. The total cost of the scheme for the Metropolis, to which the Government contributed on a £1 for £1 basis, was £638/11/-, and the amount for which the City was liable, on a population basis, was £44/19/8.

After the termination of the scheme at the end of April, the Executive Committee decided that the stock of immune human serum, with any equipment, should be placed under my charge, and be made available on the lines previously laid down in 1925. Dr. Jean Macnamara consented to act in an honorary capacity for the remaining portion of 1926. On five occasions, assistance was rendered by the Council's Nurse in connection with "donors" of blood for the preparation of immune human serum.

CEREBRO-SPINAL MENINGITIS.

Two cases were notified, compared with one in 1925. The ages of cases were 7 months and 9 years, and both were admitted to the Children's Hospital for treatment. There were no deaths, compared with one in the

previous year. The Council's Nurse paid two visits to the homes of cases, in order to deliver the leaflet of precautions against the spread of infection, and took three swabbings from contacts, which proved negative on bacteriological examination. The source of infection could not be traced for either case, but insanitary defects were found at one home, for which notice under the Health Act was subsequently issued.

DYSENTERY.

Nine cases of Dysentery (bacillary) were reported, compared with 12 in 1925. Four of the cases were inmates of children's institutions, and of these, three belonged to the Children's Welfare Depot, Royal Park. Eight of the attacks were in males, and one in females. Seven of the children were under one year of age, and the others were in their second year. In five instances it was reported that the infection was of the Flexner type. Of the cases notified in infants under one year of age, investigation showed that four were being fed on cow's milk, one was breast-fed, and in two the nature of the feeding could not be ascertained. One child only was attending a Baby Health Centre at the time of onset of illness. There were three deaths, the ages being nine months, ten months, and five weeks, respectively, compared with one in 1925. The Council's Nurse paid six visits to the homes of cases in order to enforce measures against the spread of infection.

ENCEPHALITIS (LETHARGIC).

Three cases were notified, compared with two in 1925. All of the cases proved fatal, compared with one death in the previous year. Two of the cases were in males, aged 14 years and seven years, and one in a female aged 42 years. There was no connection between any of the cases so far as place of residence and date of attack, and the source of infection could not be traced. Four visits were paid by the Council's Nurse to the homes of cases, in order to ensure that precautions against the spread of infection were being taken.

TETANUS.

One case, in a male aged 16 years, was notified, and proved fatal. According to the history obtained, the patient was employed at a Felt Hat Mills outside of the City, and injured the second finger of his left hand against the cog-wheel of a machine at which he was working. He attended hospital as an out-patient, but symptoms of Tetanus did not develop until fourteen days after the date of his accident, when he was admitted as an in-patient, and died after five days, in spite of the administration of large doses of anti-tetanic serum.

ANTHRAX.

A report was received from the Melbourne Hospital on 21st May that a case of Anthrax had been admitted. The patient was a man (aged 37 years) living at Essendon. He was employed as a traveller by a firm in Flinders Lane, which dealt in brushware and ironmongery. The history obtained was that on 13th May, while at Wodonga, he noticed a pustule appear on his neck, just below the right side of the jaw. The pustule increased in size and, when seen hy his doctor on 20th May, a smear taken from it proved, on bacteriological examination, to contain germs of Anthrax. The diagnosis was confirmed after his admission to Hospital.

The shaving brush used by the patient had a yellow wooden and metal handle, the hair being dyed to imitate badger hair. It was of Japanese manufacture, but bore no marks indicating the place of origin. The patient had had the brush, which was one of a box of six, in his possession for about 15 months, and used it about six times during the ten days immediately before the pustule occurred. Five brushes of the same type as the one which caused infection were recovered from the patient's home, and two of these were found, after bacteriological examination, to be infected with Anthrax. Search was made at the premises in Flinders Lane, and it was learned that about 18 dozen Japanese shaving brushes, which had been in stock for about four years, were destroyed by burning on 23rd May. About half of these were of the same type as that which caused infection, and it was not possible to trace the agent

from whom they had been purchased. The firm's books showed that two half-dozen boxes of the incriminated type of shaving brush had been sold to country storekeepers in December, 1925, and January, 1926. Notification was sent to these storekeepers, and they had the brushes destroyed by burning. No case of the disease occurred in any City resident during 1926.

HYDATID DISEASE.

This disease was gazetted as notifiable under the Health Act 1919 on the 4th August. One case was reported in a man aged 24 years, who was admitted to hospital for treatment for Hydatid Cyst of the liver. The history obtained was that the patient had lived at Wangaratta until four years ago, when he came to reside in the City, and work as a motor mechanic. He had been in close association with dogs at his home as a child, and when 13 years of age had stayed for some months on a sheep farm. He had suffered from symptoms referable to his condition for about two years. One death from Hydatid was registered in a male, aged 57 years, in July, before the disease was made notifiable.

Reports that the incidence of Hydatid in children was greater in the areas of Flemington and Kensington, where the Abattoirs are situated, than in other City areas, stimulated action for measures against the spread of the disease. A report furnished in March by Professor H. A. Woodruff, of the University Veterinary Research Institute, showed that, of 16 dogs examined at the Abattoirs, two were found to be infected with Echinococcifer granulosus, which is the tapeworm responsible for Hydatid in man. At a conference of Metropolitan Medical Officers of Health and School Medical Officers held on 25th June, addresses were given by Professor Woodruff, Dr. Harold R. Dew, a recognised medical authority on this disease, and myself. Resolutions were carried at the conference that Municipal Councils, Abattoir Authorities, and Departments concerned with Education and Public Health be invited to join in a vigorous preventive campaign against the disease. For the purpose of educating the public on this subject, the following leaflet was prepared by me for distribution in the City:—

CITY OF MELBOURNE.

PRECAUTIONS AGAINST THE SPREAD OF HYDATID DISEASE.

Hydatid is an infectious disease, and persons of any age may suffer from it. Through the neglect of precautions against the disease many persons become infected, and suffer from serious illness, which is sometimes fatal.

The disease is caused through man or other animals swallowing the eggs of a tape-worm, which lives in the intestine of the dog. This tape-worm, which is less than a quarter of an inch in length, may be present in large numbers in the dog, and yet the animal may show no obvious signs of the disease. Eggs of the tape-worm are voided by the dog in large numbers in its excrement. After being passed, eggs remain alive for a long time, but they cannot hatch out and develop unless they enter a human being or some suitable animal by being swallowed.

Eggs may get on to pasture and grass, infecting sheep, pigs and cattle; into water, which may infect man or animals; or on to vegetables, which are eaten uncooked, such as salads, water-cress, etc. Eggs cling to the hair of dogs about their bodies and noses, and thus, if an infected dog is handled or allowed to lick the hands or is fed at meal times, eggs may possibly be carried on the fingers direct to a person's mouth.

Eggs swallowed by man or animals develop, and the parasites bore their way to some organ of the body—the liver, lung, brain, etc.—where they grow into bladders or cysts, which are called Hydatids. Dogs become infected by eating portions of an animal, such as liver or lights, containing Hydatids. These Hydatids contain many eggs, which develop into tape-worms in the dog's intestine, and such an infected dog becomes a source of danger to man and other animals.

The prevention of Hydatid disease could be readily secured by the destruction of all offal (plucks) containing hydatid cysts. Dogs should not be allowed to enter slaughter-houses, nor eat uncooked offal. Drenching, with a suitable worm-medicine, three or four times a year, of dogs which have to be used about abattoirs or amongst stock in the country, is effective in keeping these animals free from tape-worm. Dog-kennels and areas where dogs are chained up should be scalded at intervals with boiling-water, which easily kills the eggs of the tape-worm. Ownerless and useless dogs should be destroyed. Do not allow dogs to enter the house, play with children, lick the hands or face, and never feed them at one's own meal time nor from utensils used by human beings. Prevent dogs from access to any water which is used for drinking by man, and

never drink any water from unprotected ponds or streams unless it has been boiled. Keep dogs away from kitchen gardens and boil all vegetables before eating them. If salads are required, wash thoroughly all such vegetables leaf by leaf in running water. It is safer to avoid salads from unknown and unprotected sources.

Remember, the ONLY source of Hydatid disease in man is a dog affected with these minute tape-worms.

-Issued by the Melbourne City Council.

For any further information in regard to this matter, application can be made to the Medical Officer of Health (Dr. T. W. Sinclair) at the Town Hall, Melbourne.

TUBERCULOSIS.

The number of notifications received from medical practitioners was 80, of which 75 were for Pulmonary Tuberculosis, and five for other forms of Tuberculosis. The deaths from Phthisis registered during the year numbered 57, compared with 83 in 1925, and are equivalent to the low death rate of .56 per 1,000 of the estimated mean population. The number of cases of Phthisis from the City admitted through the Tuberculosis Bureau of the Public Health Department to Sanatoria was as follows:

—Heatherton, 46; Greenvale, 4; Amherst, 12; Austin Hospital, 11; and Janefield, 6. At these institutions 24 deaths of City residents occurred, and are included in the total figures of the City for the year.

The notifications and deaths from Phthisis for corresponding years in the following table show a marked decline this year:—

| Year | 1913 | 1914 | 1915 | 1916* | 1917 | 1918 | 1919 | 1920 | 1921 | | | 1924 | 1925 | 1926 |
|------------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------|--|----------|-------|------------------|------|----------|
| Notifications Deaths . | 156 93 | 158 106 | 124 76 | 120 97 | 105 82 | 107 90 | 100 84 | 94 | $\begin{vmatrix} 96\\116\end{vmatrix}$ | 78 81 | 94 97 | 89 89 | 96 | 75 57 |

*Since 1916, deaths of City residents in the Austin Hospital have been included.

The deaths from all forms of Tuberculosis numbered 61, compared with 94 in 1925, and are equivalent to a death rate of .60 per 1,000 of the estimated mean population, the lowest ever recorded for the City. The Council's Nurse paid 1,447 visits to the homes of cases, and to patients who had been discharged from Sanatoria, distributing the leaflet of precautions against the disease, and advising measures to be carried out in order to minimise the spread of infection. Inspection of the homes of cases showed that at 25 there were defects of an insanitary nature, which necessitated the service of notice under the Health Act for their correction. The distribution of notified cases in the various Wards of the City is shown in Table III, and a comparison of the death rate for all forms of Tuberculosis with that for former years is shown in Table I.

TABLE III.

Showing population and distribution of notified cases in the various Wards for the City for 1926:—

| Ward | Albert | Bourke | Gipps | Hope- toun | Latrobe | Lons- dale | Smith | Vi c- toria | Total for City |
|-------------------|----------|----------|-------|---------------|---------|---------------|----------|-----------------------|----------------------|
| Estimated Mean | | | | | | | | | |
| Population . | 8,900 | 12,800 | 6,740 | 31,070 | 3,720 | 2,550 | 14,550 | 21,370 | 101,650 |
| Scarlet Fever . | 1 | 4 | 2 | 19 | | | 8 | 11 | 45 |
| Diphtheria | 15 | 19 | 8 | 51 | 2 | | 31 | 42 | 168 |
| Typhoid Fever | | | | 3 | 1 | | | | 4 |
| Pulmonary | | | | | 1 | | | | |
| Tuberculosis | 7 | 7 | 6 | 18 | 3 | 2 | 15 | 17 | 75 |
| Other Tubercu- | |] | | | | | | | |
| lar Diseases | <u> </u> | <u> </u> | | 1 | | _ | | 4 | 5 |
| Cerebro-Spinal |) | ĺ | | | | | | | |
| Meningitis . | <u> </u> | <u> </u> | _ | <u> </u> | - | <u> </u> | | 2 | 2 |
| Poliomyelitis . | _ | | _ | 1 | | - | | | 1 |
| Puerperal Fever | | <u> </u> | | _ | _ | _ | | 3 | 3 |
| Dysentery (bacil- | | } | | | | | | 1 | |
| lary) | j — | <u> </u> | _ | 1 | _ | _ | 6 | 2 | 9 |
| Encephalitis | | | | | | | 8 | | |
| (lethargic) . | 1 | 1 | | 1 | | _ | <u> </u> | | 3 |
| Tetanus | _ | _ | _ | _ | | | 1 | | 1 |
| Hydatid | _ | 1 - | _ | _ | | _ | | 1 | 1 |

CANCER.

This disease occupies a leading position amongst mortality figures, and 105 deaths were registered during 1926. The number of persons dying from cancer fluctuates from year to year, and the average annual number of deaths recorded in the City for the past fourteen years is 94, equivalent to 7.59 per cent. of the total mortality from all causes. A considerable reduction in the number of deaths from cancer would be secured, if sufferers came under treatment in the early stages of the disease, when it is more susceptible of permanent cure. Education of the public in the early and suspicious symptoms of Cancer constitutes an important feature in the fight against the disease, in order that individuals may be encouraged to seek medical advice. A leaflet on "Cancer: Its Prevention and Cure," prepared by the Cancer Propaganda Committee of the British Medical Association (Victorian Branch), was printed for circulation to the public under my direction during the year.

MATERNITY AND CHILD WELFARE.

The following table shows the number of infants visited at their homes by the Council's Nurse, with the method of feeding at the time the first visit was paid:—

| Visits to Registrars | No. of Infants Visited | Breast-fed | Breast and | Breast and Other Foods | Cows' Milk | Other Foods |
|----------------------------|------------------------------|------------|---------------|------------------------------|------------|-------------|
| 487 | 1,294 | 1,187 | 37 | | 41 | 29 |

The table shows that nearly 92 per cent. were being fed naturally by their mothers at the time of the first visit.

The distribution of the infants visited in the various Wards of the City was as follows:—

| Albert | Bourke | Gipps | Hopetoun | | Smith | Victoria |
|--------|--------|-------|----------|-------|-------|----------|
| 21 | 140 | 4 | 602 | 3 | 341 | 183 |

The average age at which the first visit was paid by the Council's Nurse to mothers and infants was eleven days, similar to the previous year, and it was found necessary to pay 813 revisits.

As was the case in the three previous years, the special bottled supply of pasteurised milk from the Willsmere Milk Company, for infants attending the four City Baby Health Centres, was again continued throughout the whole year. This supply was made available to 163 infants, as follows: Carlton Centre, 51; North Carlton, 35; North Melbourne, 50; and Flemington, 27. The total cost to the Council of milk supplied during the year was £784/12/3, but against this, the amount received from the sale of coupons to mothers was £345/5/10, or slightly more than forty-four per cent. of the total.

A notable expansion in this section of Health activity was the opening of the new centre building at Abbotsford Street, North Melbourne, on 26th May. The building is proving in every way most suitable for the work, and has been greatly appreciated by the staff and mothers which attend this centre.

The following table has been compiled from returns furnished by the staffs of the four City Centres, which are controlled by the Victorian Baby Health Centres Association. Each centre is subsidised by the Council:—

| New babies enrolled | 1,284 |
|----------------------------------|--------|
| New babies: How fed— | |
| Breast | 1,004 |
| Mixed (breast and other foods) | 144 |
| Artificial | 136 |
| Babies weighed | 13,198 |
| Babies on roll who had died | 22 |
| Babies referred to Hospital | 309 |
| Babies referred to family doctor | |

| Cases of Gastro-enteritis seen | 54 |
|---|-----------|
| Cases of Ophthalmia seen | 32 |
| Expectant mothers seen | 422 |
| Total number of attendances by mothers | 6,692 |
| Total number of visits by Nurses to homes | 7,411 |

Dr. Kate Campbell continued her work of visiting Centres until Dr. Vera Scantlebury returned from her investigational work in New Zealand and throughout this State, and resumed duty on 18th May. Dr. Scantlebury was later appointed to the position of Director of Infant Welfare in the Public Health Department, and resigned from her position under the Council on 30th September. Dr. Kate Campbell was appointed permanently to the vacancy, and commenced duty on the 1st October. At the end of the year, she presented a report on the work carried out during 1926, and referred in favorable terms to the excellent facilities provided at the new Abbotsford Street Centre.

FOOD ADULTERATION.

In compliance with the Health Act, 321 samples of foods were purchased for analysis, comprising:—Milk, 292 samples; Butter, 6; Mustard, 4; White Pepper, 4; Tomato Sauce, 7; and Vinegar, 8. Twelve of the milk samples did not comply with the standard, one being found to contain a prohibited preservative (formaldehyde). A comparison of the proportion of adulterated samples of milk, with that of previous years, is shown in the following table:—

| Year | Number of Samples of Milk Purchased | Number of Samples Adulterated | Percentage of Adulterated Samples |
|------|--|----------------------------------|--------------------------------------|
| 1908 | 264 | 50 | 18.9 per cent. |
| 1909 | 218 | 18 | 8.2 ,, |
| 1910 | 194 | 19 | 9.8 |
| 1911 | 196 | 15 | 7.6 ,, |
| 1912 | 211 | 21 | 9.9 ,, |
| 1913 | 292 | 13 | 4.4 ,, |
| 1914 | 285 | 13 | 4.5 ,, |
| 1915 | 294 | 29 | 9.8 ,, |
| 1916 | 298 | 20 | 6.7 ,, |
| 1917 | 277 | 19 | 6.8 ,, |
| 1918 | 284 | 9 | 3.1 ,, |
| 1919 | 296 | 23 | 7.7 |
| 1920 | 292 | 18 | 6.1 ,, |
| 1921 | 261 | 17 | 6.5 ,, |
| 1922 | 257 | 8 | 3.0 |
| 1923 | 274 | 14 | 5.1 ,, |
| 1924 | 270 | 14 | 5.1 ,, |
| 1925 | 289 | 16 | 5.5 |
| 1926 | 292 | 12 | 4.1 ,, |

The total number of adulterated samples of all foods purchased was 15, including two of butter, and one of tomato sauce. The samples of butter contained boric acid, as permitted under the Regulations for Foods and Drugs, but its presence was not indicated on the label, as required by law. The offenders were prosecuted and fined. A similar breach of the regulations occurred with the sample of tomato sauce, which contained an allowed preservative, but its presence was not disclosed on the label, as required by law. Proceedings were instituted, but the case was withdrawn on payment of costs. The total fines and costs imposed for offences for food adulteration amounted to £68/5/6.

Twenty-four seizures of food unfit for human consumption or in contravention of the Health Act were made, comprising:—dried fruits, bacon, digestive meal, fish, gluten flour, confectionery, meat, fruit, tinned fish, jam, walnuts, and olives. Four seizures of food utensils were also made on account of their defective condition.

Twelve samples of milk purchased from milk carts and city cafes were submitted for bacteriological examination to Dr. R. J. Bull, and the results of these are contained in his report, which is attached.

For all breaches of the Health Act and Regulations relating to food premises and food sold for human consumption, proceedings were instituted in fifty-one cases, and fines and costs amounting to £191/7/6 were imposed.

NEW LEGISLATION.

During the year the following new legislation, issued by the Governor-in-Council, under the Health Act 1919 and other Acts, came into operation in the City:—

Eating House Regulations 1925.

Dysentery (Bacillary) and Dysentery (Amœbic) may be treated at the Queen's Memorial Infectious Diseases Hospital.

Nurses' Registration Regulations 1926.

Foods and Drugs Standards Regulations 1926.

Hydatid Disease declared a notifiable infectious Disease (Gazette, 4/8/26).

Boarding and Lodging House Regulations 1926.

Health Act 1926.

ROUTINE DEPARTMENTAL WORK.

Disinfection by Council's Staff.—No. of rooms: Scarlet Fever, 38; Diphtheria, 153; Tuberculosis, 85.

Medical certificates furnished by occupiers for room disinfection, 14. Bedding destroyed by owners, 7. Fees received for disinfection by Council's staff, £4/2/6.

Insanitary Premises.—Number reported for condemnation, 425; number demolished, 58; number repaired, 238; number work in progress, 129

Stables reported for condemnation, 35: number demolished, 16; number reconstructed, 13; number discontinued, 6; number of prosecutions, 4; fines and costs imposed, £11.

Eating Houses.—Number registered, 381; number refused registration, nil; number of inspections, 9,341; number partly reconstructed, 58; number abolished, 30; number of reports, 428; number of prosecutions, 22; fines and costs imposed, £76/2/-.

Manufacture of Ice Cream and Aerated Waters, etc.—Number registered, 159; number of inspections, 2,531; number partly reconstructed, 13; number abolished, 10; number of reports, 165.

Other Food Premises.—Number of inspections, 7,553; number partly reconstructed, 44; number abolished, 14; number of prosecutions, 9; fines and costs imposed, £33/5/-.

Boarding Houses.—Number registered, 666; number of inspections, 2,578; number partly reconstructed, 36; number abolished, 83; number of reports, 676; number of prosecutions, 2; fines and costs imposed, £2.

Common Lodging Houses.—Number registered, 46; number of inspections, 560; number partly reconstructed, 5; number abolished, 2; number of reports, 48; number of prosecutions, 1; fines and costs imposed, £10.

Hairdressers' Shops.—Number of inspections; 2,162; number partly reconstructed, 16; number abolished, 10; number of reports, nil; number of prosecutions, nil.

Offensive Trades.—Number registered, 94; number refused registration, 2; number of inspections, 721; new premises registered, 1; new premises erected, 1; number partly reconstructed, 17; number of reports, 101; notices under regulations served and complied with, 5; number of prosecutions, nil.

Cattle Saleyards.—Number registered, 2; number of new premises registered, nil; number refused registration, 1; number abolished, 1; number of inspections, 24; number of reports, 3; number partly reconstructed, 1.

Factories.—Number of applications for approval, 18; number approved (Health Act), 15; number of inspections, 208; number of reports, 16; total premises in City registered by Factories Department: Factories, 2,171; shops, 4,074.

Rat Destruction.—Number of complaints, 261; number of premises visited, 2,182; number of rodents (rats and mice) taken, 9,597; structural work effected at premises for rat prevention, 114; notices under Rat Destruction Regulations served and complied with, 12; charges for rat destruction, £1,027/8/3; number of prosecutions, 8; fines and costs imposed, £14/1/-.

Smoke Nuisance.—Number of complaints, 20; number of inspections and observations taken, 126; number of premises where alterations were effected for prevention of smoke, 12 (including reconstructed furnaces, 8; oil fuel, 2; increased electrical power, nil; special smoke-consuming apparatus, 2); number of presecutions, 3; fines and costs imposed, £7/2/-.

Hospitals.—Number of private hospitals in City registered by Commission of Public Health, 23; number of inspections, 13; number of reports, 12.

Public Buildings.—Number of dancing saloons registered, 20; number of places of pastime registered, 3; number of day and evening inspections made, 850; number of reports, 76; number of public buildings in City registered by Commission of Public Health, 54.

General.—Plans submitted for examination, 169; number of inspections of yards, 4,455; of lanes, 854; number of notices served under By-law 117, 45; By-law 135, 86; By-law 150, 112; complaints received and attended to, 519; special complaints where females were employed received and attended to, 27; instructions served on householders for infectious disease, 284; for Pulmonary Tuberculosis, 134; special visits to cases in connection with Diphtheria Campaign, 20; Poliomyelitis campaign, 5.

Returns furnished to Public Health Department for infectious diseases, 335; new registrations and transfers, 336.

Notices of infectious disease sent to schoolmasters, 161; specifications of works sent to owners, agents, etc., 449; matters referred to City Engineer, 42; to By-laws Officer, 6; to Dog Inspector, 10.

I have the honor to be,

Sir,

Your obedient servant,

T. W. SINCLAIR, M.D., B.S. (Melb.), D.P.H. (Lond.), Medical Officer of Health.

Medical Officer of Health's Office, 9th March, 1927.

DIAGRAM SHOWING ANNUAL GENERAL DEATH RATE FROM ALL CAUSES PER 1000 LIVING IN

9261 08.6 9361 ££.6 t281 £5.01 11.72 8261 2261 19.01 85-11 1761 92:21 6161 #8.51 Influenza Epidemic THE CITY FOR THE YEARS 1887-1926 INCLUSIVE. 8/6/ 02.11 1161 8801 9161 हर २१ 5161 1221 1161 2/8 61.21 8161 201 2/61 1161 3.2! 1.L.E/ 9 E/ 0161 BOBI 8961 0.51 1 11 17 58 05 721 78 78 8 81 1.061 9081 5061 7061 8061 0.91 2061 1.91 1051 15.31 0061 6681 LEEI 691 8681 1681 9 81 E tr/ 9881 5681 1.51 2.51 #681 8.91 8581 2681 151 1681 0681 \$2.01 1.61 50.12 05.81 9.02 6881 1881

Medical Officer of Health's Office, Town Hall, Melbourne, 18th January, 1927.

REPORT OF THE DIPHTHERIA CAMPAIGN FOR THE YEAR 1926.

The Medical Officer of Health,

SIR—I beg to submit the third annual report of the Campaign against Diphtheria, which includes the work carried out by Dr. A. D. Hensley during the period 1st January to 31st March, and the continuation of the campaign by myself for the period 1st April to 31st December.

During the year the various schools and children's institutions in the City have been visited and Throat Inspection, Schick Testing and Active Immunisation have been carried out amongst the children whose parents desired to take advantage of these measures. In this respect, it is of interest to record that, out of 6,150 pamphlets distributed, consent for the treatment was given in 2,087 cases (i.e., 34 per cent. availed themselves of the opportunity for protection against diphtheria).

Throat Inspection.—In all, 1,903 children were examined, and of these no less than 1,040 (or 55 per cent.) showed an unhealthy condition of the nose or throat. An attempt was also made to correlate the result of the Schick Test with the condition of the nose and throat, and the following results were obtained with this group of children:—

TABLE I.

Comparison of Result of Schick Test with Throat Condition.

| | ' . | • | | | |
|---------------|---------|-----------|-----------|-----------|------------|
| Conditio | on of | Number | Schick | Schick | Percentage |
| of Thro | at. | examined. | Positive. | Negative. | Positive. |
| (1) Throat | healthy | 848 | 235 | 613 | 27% |
| | Male | 460 | 125 | 335 | 27% |
| | Female | 388 | 110 | 278 | 28% |
| (2) Tonsillec | tomy | | | | |
| done | | 297 | 98 | 199 | 33% |
| | Male | 170 | 60 | 110 | 35% |
| | Female | 127 | 38 | 89 | 30% |
| (3) Throat | | | | | |
| unheal | lthy | 690 | 367 | 323 | 53% |
| | Male | 312 | 168 | 144 | 53% |
| | Female | 378 | 199 | 179 | 53% |

Although this is a relatively small series from which to deduce any definite conclusion, it would seem to indicate that the child with an unhealthy throat is twice as susceptible to diphtheria as the one whose throat is healthy. Further, in those children who have had their tonsils removed, presumably because they had been unhealthy, we find the percentage of susceptibles closely approaching that of the healthy throats.

Schick Testing and Active Immunisation.—Since the majority of the children were dealt with in 1925, the work during the past year has been concerned chiefly with the new scholars and children who have become inmates of institutions during the year. Hence the smaller total number of children dealt with, although the number of places visited was larger than in the previous year.

The small children under four years of age, met with chiefly at the Health Centres, were given the three immunising injections without any previous Schick Test.

The variation in the incidence of a positive Schick Test with the age of the child is well illustrated in the following table:—

TABLE II.

Incidence of Positive Schick Test in Relation to Age of the Child.

| Age in years Percentage | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Positive . | 64% | 61% | 38% | 41% | 37% | 32% | 30% | 29% | 30% | 18% |

An attempt has also been made to retest as many as possible of those children who had been immunised during the previous year, and, in all, 234 of these were allowed to be retested by their parents. The results showed that the majority of these children are now Schick Negative, indicating that the previous immunisation had been effective. Further, of those who still reacted to the test, the great majority gave a very mild or modified reaction, showing that in these the immunisation had been effective to a certain degree, but was not quite complete. The detailed figures are shown in Tables III, IV, V and VI.

Reaction to Injections.—Untoward general reactions following the Schick Test or the immunising injections have been uniformly conspicuous by their absence, and no child has reported any serious indisposition during the treatment.

Previously Tested Children who have since come under observation.—In addition to those children who were retested after previous immunisation, several others who were treated previously have been under observation during the year.

Three children, who had been shown to be susceptible to diphtheria, but had not been immunised, contracted the disease. One died in hospital, and the other two had a severe attack, but ultimately recovered.

One girl, who had been immunised previously, developed diphtheria and was very ill, but recovered completely. This patient had not been retested subsequent to immunisation. One child, shown to be Schick negative, contracted a mild form of nasal diphtheria. Finally, two children who were Schick negative in 1925, both attending the same school, contracted diphtheria, but recovered completely. These two patients had very unhealthy tonsils, and this appears to be the condition of the throat in practically all Schick negative individuals who contract diphtheria.

This further emphasises the importance of dealing with the unhealthy throats, in addition to active immunisation, in any campaign against diphtheria.

In conclusion, I should like to record my deep appreciation of the courtesy of the teachers and officials of all the schools and institutions, and of the valuable assistance rendered by them during my visits.

TABLE III.

| Date of Completion | of Immunisation | | 7/5/26 13/7/26 13/7/26 13/7/26 13/6/26 13/6/26 13/6/26 13/6/26 13/7/26 13/7/26 13/7/26 14/10/26 14/10/26 13/7/26 14/10/2 | |
|-------------------------------------|---------------------------|--------|--|------------|
| Toxin | Anti-Toxin Mixture | Batch | 859.1 859.2 925 859.2 925 930 664 859.2 664 859.2 | |
| | Toxin | Batch | 822 837 886 928 931 886 985 891 896 895 895 897 896 836 842 836 842 836 842 836 842 836 843 837 842 836 843 837 842 837 842 843 844 844 884 844 884 844 884 844 884 845 886 848 898 848 898 848 898 848 898 848 898 848 898 848 898 849 898 840 960 841 896 842 886 843 844 844 886 844 886 845 886 846 887 847 886 848 898 848 898 | c |
| 70 | Re-immun- | 됴 | -400 | 16 |
| VIOUS | Re- | M | 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | <u>x</u> |
| STED AFTER PREVIOUS IMMUNISATION | Positive | Œ | -40-0400000000000000000000000000000 | 6I |
| AFTEI NISAT | Pos | M | 0%-%0-10%000000000000000000000000000000 | Â |
| TED (| Negative | 도 | | 103 |
| RETESTED IMMU | Negr | M | 00 % 40 4 6 0 0 M C 1 1 0 M O 4 61 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 9 |
| | Incompletely | 됴 | 0H8804H00000H000H00000H 0H0804000C048H0000 | 00 |
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| THE F | Immunised | Į | on the state of th | |
| FOR 7 | II | M | , ou | |
| TESTED | Positive | 도 | | |
| TES | Po | M | ထားလ်ခ်င်းၿမိဳးအရမ်္မာလေသာမှီးနေၿနခံမှည်မေရေးရှိရခဲ့က အဝန္ဝမ်န္တဝမဟာမဝန္ဝဝင်းမှာ ကြွေး | |
| | Negative | Female | → 1800 000 | |
| | Neg | Male | 27 8 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | |
| Total | Child'n. Treated | 4 | 25 117827584598459888888888888888888888888888888 | |
| | , | | 21 | |
| No. in order of complet- | ion of im- nurisation | | 24788828228244888828888288952830114455554444 | |
| | | , | | |
| _ | : | | chool (Caronth Melb. orth Melb. orth Melb. school school school col co | |
| Htutio | | | hool ol lo lo North M. Mol School Null, Mi. Mol ol School School lo School School school cho | |
| r Inst | | | ate School School School School School School School School State School School School School School School Boys' School Boys' School Boys' School Boys' School Boys' School Scho | |
| School or Institution | | | and State St | |
| S | | | Boundary Rd. State School Errol St. State School Flemington State School Flemington State School Flemington State School Flemington State School Kensington State School Fleme's Hill State School Fleme's Hill State School Fleme's Hill State School Flemesberry St. State School Christian Bros. College, Nth. Melb. Holy Rosary R.C. School St. Brancis R.C. School St. Brendan's R.C. School St. Brendan's R.C. School St. Brendan's R.C. School St. George's R.C. School St. Mary's R.C. School St. Jude's C. Of Er Kindergarten St. James' Church of England Kindergarten (including Alice Lovel) Clarke Home St. Jude's C. of E. Kindergarten St. Mary's C. of E. Kindergar | |
| | 1 | | Earnol Errol Errol Errol Errol Errol Errol Gratti King King Lee S Couth St. A | |

NOTE, --St. Augustine's R.C. School and Howard Street Methodist Kindergarten have been elosed. Yarra Park State School and St. John's R.C. School asked for the work to be postponed until early in 1927.

Berry Street Foundling Home, Church of England Bables' Home, East Melbourne, and the Salvation Army Creche, North Carlton, were all visited, but no replies received with reference to commencing the work. Bouverie Street Kindergarten children treated at Carlton Baby Health Centre.

TABLE IV.

| DEACTION | | | | | Tested | Tested for the First Time. | First 7 | rime. | | | | | |
|---|-------|----------|------------------------------|--|--------------------------------|----------------------------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|
| KEACTION | | 21 | က | 4 | 5 | 9 | 2 | ∞ | 6 | 10 | 11 | 12 | 13 14 |
| Negative (all types) Positive (all types) Total Percentage Pos. | 711 | H60 | 100 | 21 23 64% 36% | 64 102 166 61% 39% | 104 1143 547 42% | 134 95 229 41% 49% | 158 91 249 37% 63% | 165 78 243 32% 68% | 149 62 211 30% 70% | 143 58 201 29% 71% | 113 49 162 30% 70% | |
| | | | Tot Tot Per | Total Tested 1 Total Positive Percentage Pos | for first sitive. | time | | | 2,05 | 2,050 825 40% | 1 | | |
| | | | | | | TABLE |) X | | | | | | |
| | | | | Re-tested | ed after | er Previous | | Immunisation | tion. | | | | |
| | | 2 | 3 | 4 | 22 | 9 | 7 | 8 | 6 | 10 | 11 | 12 | 11 |
| | 40000 | 40.00 | 80000 | 9000c | සටසහට | es 11 52 de 1 | 8 1 4 H C | 00 04 11 00 00 00 | 07 00 00 00 00 | 0110 | 000000 | N N O O C | and over 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| Positive Combined Percentage Pos | 10 | | 100% | 0 14% 86% | 63% | 27 7° 73 9° | 17% 83% | 19% 81% | 16% 84% | 6% 94% | 13% 87% | 100% | % 100% |
| | | | Tot Tot Per | Total Retested Total Positive Percentage Pos | sted ive Positive . | | | | 6.6. | 34 38 16% | | - | |
| | | | | | | TABLE | VI. | | | | | | |
| | | <u> </u> | Completely . Incompletely | : 2 | Immunised | | without Testing | sting. | : | 261 | | | |
| | | | Total | 1 | | | | • | | 328 | | | |
| | | | | | | | | | | | | | |

I have the honor to be, Sir,

Yours faithfully,

(Sgd.) ROBERT SOUTHBY, M.D., B.S. (Melb.)

THE UNIVERSITY OF MELBOURNE

BACTERIOLOGY LABORATORY.

Carlton, 24th January, 1927.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory,

Melbourne University, for the year 1926.

Diphtheria.—The details of throat swab examinations were as follow:—

Of 724 swabs examined, 38 contained diphtheria bacilli; 7 pseudo-diphtheria bacillus; and 679 contained cocci only.

One specimen of sputum was forwarded, but no tubercle bacilli were detected.

Examination of the City Milk Supply.—Six samples were collected and examined on 3rd August, and six samples were collected later in the year, on 23rd November. The results were as under:—

Milk Samples received 4th August, 1926.

| | Micro-organisms per c.c. | Bac. Coli in 1 drop (1-25 c.cm.) |
|---------|---|----------------------------------|
| 1 | 10,000 | |
| 2 | 9,000 | |
| 3 | 10,000 | |
| 4 | 12,000 | parameter. |
| 5 | 45,000 . | + |
| 6 | 20,000 | - |
| | *************************************** | |
| Average | e 17,000 | |
| | | |

Milk Samples received 23rd November, 1926.

| 7 | 6,000 | |
|---------|-----------|----------|
| 8 | 50,000 | + |
| 9 | 190,000 | <u> </u> |
| 10 | 21,000 | |
| 11 | 27,000 | |
| 12 | 1,600,000 | + |
| | *** | · |
| Average | 314,000 | |

Remarks.—On the whole, the milk supply was very good from a bacteriological standpoint, particularly that collected in August. Very few excremental bacilli were detected in the samples. Only one sample averaged higher than one million organisms per cubic cm.

(Signed) R. J. BULL, M.D., B.S. (Melb.),
Director, Bacteriological Laboratory.

MELBOURNE ANALYTICAL LABORATORY,

27 William Street, Melbourne, 12th January, 1927.

The Chairman,

Health Committee,

City of Melbourne.

SIR—We have the honor to report that during the year ended 31st December, 1926, we have received 321 samples of Food and Drugs. The following is a brief summary of the results obtained by the Analytical Examinations:—

Milk—292 samples

280 complied with the standard.

- 2 below the standard in their total solids, solids not fat and fatty solids (milk fats).
- 2 below in their total solids and solids not fat.
- 5 below in their total solids and fatty solids (milk fats).
- 2 below in their fatty solids (milk fats).
- 1 contained 0.4 grain of formaldehyde to to the gallon.

Complied with the standard.

Complied with the standard.

- · 6 no adulteration was detected.
 - 1 contained 0.3 grain of salicylic acid to the pound.

Complied with the standard in their acetic acid. No mineral acid or coal-tar colouring was detected.

Complied with the standard. Of these—

- 3 no boric acid was detected.
- 3 contained 0.08 per cent., 0.11 per cent. and 0.12 per cent. of boric acid.

Yours obediently,

(Signed) DUNN & SON,

Analysts to the City of Melbourne.

mirk—232 samples

White Pepper—4 samples
Mustard—4 samples

Tomato Sauce—7 samples

Vinegar—8 samples

Butter—6 samples